Mayes OF CHANGE

2021 ANNUAL REPORT





Waves of Change

When we think of the waves on Okanagan Lake, we imagine them rise and rush in, and then dissipate. Sometimes the force of the wave fundamentally changes the shoreline, and sometimes the waves slide back off leaving no sign they were there.

The impact of the waves depends on how big they are, and what latent energy they carry, but it also depends on how resilient the landscape is along the lake. Some changes—movement of sand, natural restoration of shore habitats, for example—are healthy and good. Often the areas of the lakeshore that are most fragile, the most vulnerable, are the human-built constructions designed assuming that lake conditions will always be roughly the same.

So it is in the face of global change—the waves of the COVID-19 pandemic, the waves of social change, changes to how we work and gather—which shattered some of our society's constructs, but has also showed us how and where we are resilient. It was important to be flexible and agile, responding to each new wave as it came. We learned a lot about what we value, and where our strengths truly lie. Some of the change has been positive—exposing inequality and inefficiencies, and forcing us to adapt with new tools. And fundamentally, we were reminded that the most important aspects of our lives and work are our relationships, and supporting one another.

Many of the profound societal shifts from this year's waves of change are not yet fully realized. What will return to the way things were, and what will continue on a new trajectory? As the theme for the OBWB's 2021 Annual Report, we consider here how the waves of change affected our work during the past year, and how we grew and learned from them.



Waves crashing against Okanagan Lake shoreline at Peachland



Waves of Change

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Sue McKortoff **OBWB** Chair

MESSAGE FROM THE CHAIR

The past year has seen profound changes in our health care needs, our interactions with family and friends, and finding innovative ways of conducting business and connecting, often not in person but on video conferencing platforms from our homes. Yet, through this stressful and often confusing time, we have continued to work toward protecting our shared Okanagan water. While some of the challenges have taken a higher priority at times, milfoil harvesting, flood and drought response, flood mapping and preventing the influx of invasive species into our lakes continue to be of great importance.

Several programs, managed by our OBWB staff, draw welcome attention in the media to water issues in our valley. This includes Make Water Work which celebrated its 10th year with valley mayors sharing videos of themselves showing ways to use outdoor water efficiently, while encouraging citizens to "take the pledge" and become Make Water Work Champions. The website www.OkWaterWise.ca is also full of resources for residents, visitors, businesses and students to understand and appreciate our precious water.

Another major program is Don't Move a Mussel, started in 2013 and which continues to draw attention to the threat of invasive zebra and guagga mussels and how to prevent an infestation. The OBWB continued to work with federal and provincial agencies, and strongly encouraged the province to require all watercraft owners coming to B.C. to Clean, Drain and Dry their vessels before launching in provincial waters. We continue to push for "Pull-the-Plug" legislation to require that all watercraft have their drain plugs removed prior to transporting.

We were also pleased to co-host, for a second year, the AquaHacking Challenge in 2021, this year expanding and welcoming students from across Western Canada to work on water protection projects. The Lake Level Management Review, conceived this year, will look at updating the infrastructure and management of Okanagan Lake. The interactive public website at www.OkanaganFloodStory.ca continues to be updated as we try to understand and reduce flood risk. A Source Water Protection Toolkit is being prepared for local governments while we ask the province for stronger protection of drinking water sources and watershed security.

During the COVID-19 crisis, our staff at OBWB continued to manage events and projects efficiently, while we held our monthly Board meetings via Zoom. Our continued determination to protect and manage Okanagan water in conjunction with the indigenous values of the Syilx Nation and B.C.'s commitments under the United Nations Declaration on the Rights of Indigenous People, keeps us enthused and ready to take on present and new challenges. The waves of change will continue to ebb and flow as we adjust our course in our unpredictable world.



Anna Warwick Sears *OBWB Executive Director*

MESSAGE FROM THE EXECUTIVE DIRECTOR

This was a year of change for the OBWB, and also a year of staying true to course. While the OBWB board, staff, and Okanagan Water Stewardship Council pivoted to online meetings, working from home, and digital signatures, the work of the board continued on steadily. The first half of the year was fairly quiet, as many of our government partners were responding to the COVID-19 emergency, but as things got organized the tempo of work picked up to normal, even if socially-distant.

Once everyone was past the awkward stage of learning the new technology, we discovered many positive aspects to working digitally 95% of the time. Everyone was able to work safely. It was easy to

have face-to-face conversations with people in other parts of B.C. and Canada. We took advantage of the many new opportunities for online education, from webinars to the 12-part course on Indigenous Canada. We streamlined many of our administrative systems. Now we are looking forward to maintaining many of the advances we learned during the pandemic, and recapturing things we missed and treasure.

The OBWB has worked to support water sustainability in the Okanagan for more than 50 years, and many things have changed for Okanagan water since that time—but building and maintaining relationships, and collaboration, have always been at the core of this work.

OKANAGAN BASIN WATER BOARD

ORGANIZATIONAL OVERVIEW

The Vision of the OBWB is for the valley to have clean and healthy water in perpetuity, meeting the needs of natural ecosystems, residents and agriculture.

The OBWB's mission is to provide leadership to protect and enhance quality of life in the Okanagan Basin through sustainable water management.

The OBWB's strength is in our partnerships: bringing people and resources together, and providing a means for joint strategic action. We advocate for local water concerns to senior governments, and are a public voice for water education. The Board is made up of three Directors from each of the Okanagan's three Regional Districts, one Director from the Okanagan Nation Alliance, and one Director each from the Water Supply Association of B.C., and the Okanagan Water Stewardship Council.

Board Directors



Sue McKortoff, Chair, RDOS Mayor, Town of Osoyoos



Cindy Fortin, Vice-Chair, RDCO Mayor, District of Peachland



Rick Fairbairn, RDNO Director, Electoral Area "D"



Bob Fleming, RDNO Director, Electoral Area "C"



Victor Cumming, RDNO Mayor, City of Vernon



James Baker, RDCO Mayor, District of Lake Country



Colin Basran, RDCO Mayor, City of Kelowna



Doug Holmes, RDOS Councillor, District of Summerland



Rick Knodel, RDOS Director, Electoral Area "C"



Chief Christopher Derickson, Okanagan Nation Alliance



Robert Hrasko, Water Supply Association of BC



Denise Neilsen, Chair, Okanagan Water Stewardship Council

Staff



Anna Warwick Sears, Executive Director



Nelson Jatel, Water Stewardship Director



Corinne Jackson, Communications Director



James Littley, Operations and Grants Manager



Kellie Garcia, Policy and Planning Specialist



Carolina Restrepo, AquaHacking 2020 – B.C. Challenge Coordinator



Pat Field, Milfoil Field Supervisor



David Hoogendoorn, Milfoil Operator



Morgan Douglas, Milfoil Operator



Luc Cowan, Milfoil Operator

Report on Services

The Okanagan Basin Water Board provides three core programs: Water Management, Milfoil Control and Sewerage Facilities Assistance Grants. Work in each of these programs is summarized in the three corresponding section of this Annual Report, followed by a section on Looking Forward, and finally, our Financial Statements for 2021.



WATER MANAGEMENT PROGRAM

The Water Management Program includes the Okanagan Water Stewardship Council, OBWB's Science and Information initiatives, Water Conservation and Quality Improvement Grants, and Communications and Outreach.

OKANAGAN WATER STEWARDSHIP COUNCIL

This year marked the 14th year of the Okanagan Water Stewardship Council.

Throughout this turbulent year, the Council (OWSC) played an important part in riding the waves of change experienced by water professionals throughout the Okanagan. Although OWSC meetings were hosted virtually, they continued to

be a valuable forum for the discussion of important Okanagan watershed issues. Meeting topics ranged from hydrological modeling to agricultural irrigation, to micro-plastics in waterways.

The Council was established by the Okanagan Basin Water Board as an advisory body and communication channel to water stakeholder communities throughout the Okanagan. It provides independent advice supporting sustainable water management in the Okanagan, using its collective expertise to identify basin-wide water issues and develop workable solutions that reflect the best available science, innovative policy, and consensus approaches. The Council recommends only those actions that can be undertaken within the bounds of the OBWB's mandate. In addition to its advisory role, the OWSC helps develop programs that contribute to the local knowledge base and provides stewardship tools for the watershed community.



Members of the OWSC meet online

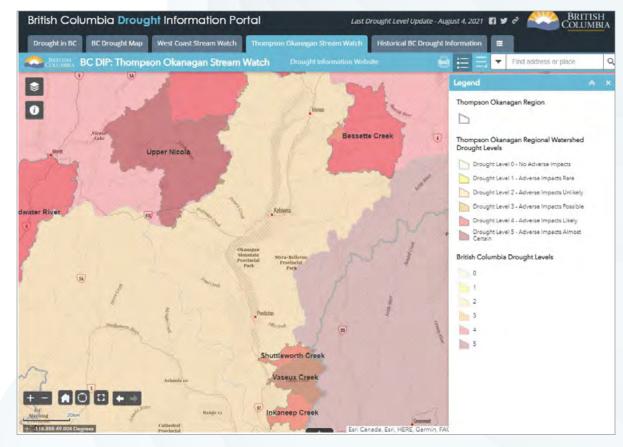
The Council is made up of representatives from federal, First Nations, provincial and local government water-related departments, including Agriculture and Agri-Food Canada, Environment and Climate Change Canada, B.C. Ministry of Forests, Lands, Natural Resource Operations and Rural Development, Interior Health, local government planners and water utility operators. Additional members include representatives from UBC Okanagan and Okanagan College water programs, and several industry and non-profit groups, including BC Fruit Growers, BC Agriculture Council, BC Cattleman's Association, BC Wildlife Federation, Okanagan Collaborative Conservation Program, and several others. To learn more, visit https://www.OBWB.ca/wsc.

WATER SCIENCE AND INFORMATION

Drought Planning and Response

Water Board staff participated on the Province's Thompson Okanagan Regional Drought Response Team, which met bi-weekly between June and October 2020. Being part of this team has enabled the OBWB to support Government of B.C. staff with their decision-making process by providing information about local water supply conditions and watering restriction stages. We have also been able to better coordinate the timing and content of our communications, so water utilities are the first to know when the Okanagan is being moved to a higher drought level, why, and what response is expected.

With input from the OBWB, the new **Thompson** Okanagan Stream Watch Tab was launched on the B.C. Drought Information Portal in summer 2020. The tab enables the Government of B.C. to indicate localized areas of concern and fine tune the way they manage drought within the large and diverse Okanagan region.



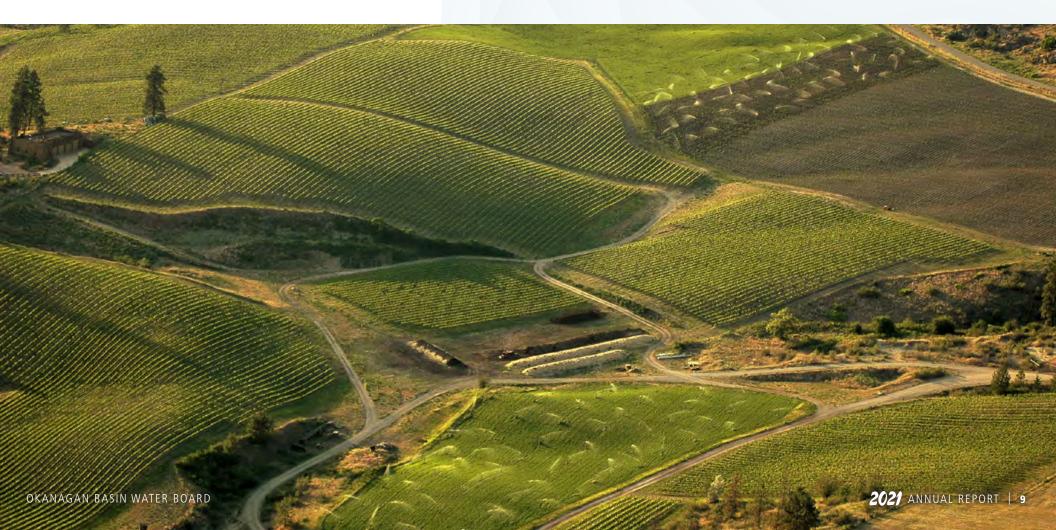
B.C. Drought Information Portal – Stream Watch Tab

Agricultural Water Supply Communications

This three-year project is helping Okanagan utilities provide timely water supply information to their agricultural customers using electronic alerts and other communication tools. Participating utilities have included Greater Vernon Water, Lake Country, Glenmore-Ellison Improvement District, Kelowna, West Kelowna, Summerland, Penticton, Kaleden, Oliver, and Regional District of Okanagan-Similkameen.

Water suppliers use multiple channels to notify farmers about the e-alerts project, including direct mail and email, paid advertising, announcements in websites, social media, newsletters, and by including project information with water bills and water turn on notices. Approximately 1,470 agriculture customers were signed up to receive alerts from one of the participating utilities during the 2020 growing season. Messages

included information on snow pack conditions, spring precipitation forecasts, lake and reservoir levels, and streamflow; current water supply levels, drought stages and associated responses; changes in provincial drought levels; and other information such as turn on/turn off dates and emergency works to infrastructure. The project is a joint effort between the OBWB and the Climate & Agriculture Initiative BC.



Flood Mapping and Related Activities

After high-water events in 2017 and 2018, the OBWB led a valley-wide partnership of local governments and Indigenous communities to update the region's floodplain mapping. The new Okanagan inundation flood mapping project was completed in March 2020. The technical reports on the flood mapping, and pdf maps, along with other flood mapping resources are provided on the OBWB website's new flood webpage: www.obwb.ca/flood.

The Okanagan Basin Flood Portal website (www.okanaganfloodstory.ca) was launched to the public on May 6, 2020. This site complements community flood websites and provides a regional perspective including photos and stories about flood history in the Okanagan. A detailed Frequently Asked Questions is included on the new website.



The OBWB also hosted a spring workshop on hydrological modeling using the Raven modeling platform, with 47 water professionals participating from across Canada. The workshop provided an opportunity to share recent Raven model projects and discuss limitations and

opportunities to improve future Okanagan Raven Hydrology modeling efforts. This virtual workshop provided an opportunity to spotlight two recently completed Okanagan hydrology models: Okanagan hydrology flood model and the Okanagan 18 sub-basin hydrology models.

Flood Bylaws Review and Recommendations

The OBWB worked with a research team at UBC Okanagan to complete an inventory of flood policies, plans, and regulatory tools currently in place in the Okanagan Valley and a comprehensive overview of the gaps, challenges, fruitful initiatives, and opportunities related to

the tools. The team also completed a review of best practices from six communities outside of the Okanagan and identified mitigation strategies that could be applicable here. The final report includes recommendations to enhance flood resilience in the Okanagan, including the development of green and permeable areas, compact housing and infill development, integrated stormwater management, energyefficient technology, stakeholder and community engagement, communication and information sharing, and flood risk assessment.



Hydrometric Monitoring

Comprehensive hydrometric information is essential for at least three areas of water management in the Okanagan: (1) local government infrastructure, (2) site-specific environmental flow needs, and (3) hydrometric and hydraulic modelling. The Okanagan's hydrometric network fell from a peak of 156 stations in the early 1980s, to approximately 25 stations in 2007. It's estimated that for optimal water management, the valley needs at least 50 strategically located hydrometric monitoring stations.

At the request of the Board, staff developed options to address current and future unmet Okanagan hydrometric information needs and presented a draft operational plan to develop a new service, "The Okanagan Basin Hydrometric Information Network." After review, the board approved the new initiative, which officially launched in April 2021 in collaboration with the Okanagan Nation Alliance and Environment and Climate Change Canada. The goal for 2021-22 is to install six stations, as part of a five-year process to install 26 stations.

As part of the hydrometric network project, the OBWB upgraded its hydrometric data management system. The upgrades support enhanced data input from partners, enhanced quality assurance and quality control, and integrated OBWB collected hydrometric data into the B.C. government hydrometric data warehouse making the information readily available to local Okanagan governments and their partners.

Wetland Strategy

Over 84% of valley bottom wetlands have been lost to development since European settlement in the valley.¹

The Okanagan Wetlands Action Plan (www. obwb.ca/wetlands) was completed this year and serves as a new resource for local governments and the public. The new plan identifies:

- Wetlands are vital to the health of our ecosystems
- Wetlands have been, and continue to be, under pressure from land development, non-point source pollution, invasive species, and most recently climate change.
- Guiding principles and a coordinated framework to guide wetland conservation and restoration initiatives across the Okanagan Basin.

Work continued on developing collaborative opportunities to support the Okanagan Wetland Strategy and projects to map, protect, and enhance wetlands throughout the Okanagan.

This year's activities included using the OBWB's new Light Detection and Ranging (LiDAR) topographical data to improve wetland maps. This two-year project is led by a graduate student and staff in UBC Okanagan's Earth, Environmental and Geographic Sciences Department. A new collaborative project is also underway, working

with partners in the North Okanagan to map and protect valley-bottom wetlands.

As part of our efforts to focus on action for our wetland strategy, the wetland leadership team

initiated hands-on projects including fencing to exclude cattle in the South Okanagan; Mill Creek restoration initiatives; and invasive species removal (like Russian olive) in wetlands.



¹ Lea, T. 2008. Historical (Pre-settlement) ecosystems of the Okanagan valley and Lower Similkameen Valley of British Columbia – Pre-European contact to the present. Davidsonia Vol 19:1:3-36.

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Source Water Protection Toolkit

The OBWB worked with Larratt Aquatic Consulting and a technical advisory committee to prepare a toolkit of B.C. source water protection best practices, processes, and policies. Part 1 of the toolkit leads water suppliers through the development of a source protection plan, which is required as part of their operating permits. The source protection plan includes an assessment of hazards and associated risks to drinking water quality and a response plan that outlines the actions needed to manage threats and track progress. The source protection plan is created and carried out in collaboration with provincial and local governments, health agencies, First Nations, land tenure-holders in the watershed, and others.

Part 2 of the toolkit focuses on source water protection tools. It includes guidance on how to lead collaborative processes, secure sustained funding, prepare local government policies and bylaws to protect water quality, and educate and engage the public and elected officials. It also includes information on how to use natural assets and green infrastructure to protect water sources, prepare for and respond to emergencies that could impact water quality, use mapping to identify and address threats and plan future land-use activities, and collect and report on water quality data.

Part 3 of the toolkit dives deeper into the regulatory framework for source protection, the

economic benefits of protecting drinking water sources, common threats to drinking water and how to overcome them, links to additional resources, and templates for a source protection assessment and response plan.

In early 2021, the OBWB received funding through the **Healthy Watersheds Initiative**

and Interior Health to create a **website** for the toolkit, prepare and deliver webinars that unpack the toolkit for water suppliers and other interested groups, and pilot the toolkit with an Okanagan community. The technical advisory committee will also continue to guide these and other source water protection initiatives.







WATER CONSERVATION AND QUALITY IMPROVEMENT GRANTS

The OBWB's Water Conservation and Quality Improvement (WCQI) Program awards a total of \$350,000 in funding annually to local governments, irrigation districts, and non-profit organizations in the Okanagan for projects that conserve and/or protect water, and provide valley-wide benefit. Applicants are eligible to receive up to \$30,000 for their project and each year the program attracts innovative and action-oriented submissions. In 2021, OBWB awarded WCQI grants to 17 projects throughout the valley. Two of these projects are highlighted below.

Okanagan Collaborative Conservation Program— Okanagan Lake Responsibility Planning Initiative

This project is the first time that multiple jurisdictions have come together to identify ways to enhance shoreline and upland management for water source protection for Okanagan Lake. Currently, there are numerous different shoreline and upland policies and recommendations that have been prepared in response to development. However, there is not a unified framework or policy for local, provincial and federal government to address cumulative impacts of shoreline development. This project is helping all levels of government develop consistent approaches and frameworks for new standards for shoreline development.

City of Kelowna—Laurel Packinghouse Indigenous Landscaping

This project established an accessible and interactive public landscape to inspire locals and tourists to appreciate and consider native xeriscaping, and to foster greater awareness that the Okanagan is a naturally arid region, where water must be stewarded with care. The landscaping is also intended to help educate residents and tourists that the *sylix/*Okanagan people thrived on native plants, and that these plants also support native pollinators.

COMMUNICATIONS AND OUTREACH

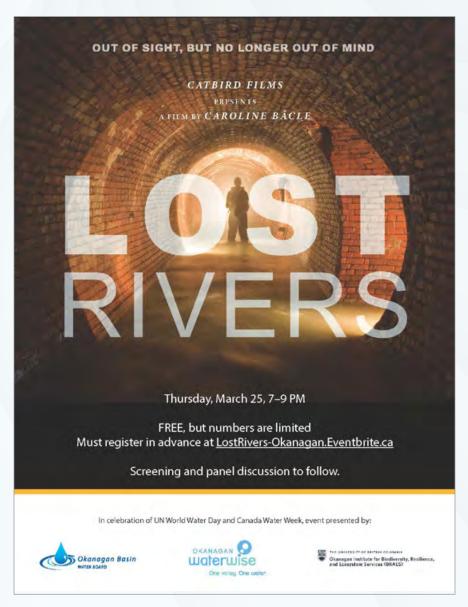
Okanagan WaterWise

Face-to-face outreach has always been an important component of the Okanagan WaterWise program. However, due to COVID-19, we had to ride the waves, adapt and modify the way we engaged with the public.

This past year we held a number of events online, including a screening of "Lost Rivers" and follow-up panel discussion for Canada Water Week. (View here.) We also hosted an OBWB 50th anniversary water speaker series featuring Bob Sandford and Seth Siegel. Sandford is Global Water Futures Chair in Water and Climate Security at the United Nations University Institute for Water, Environment and Health. (Find his video presentation here.) Siegel is a New York Times bestselling author, international water activist, and Senior Fellow at the University of Wisconsin's Center for Water Policy. (His presentation can be found here.)

In Fall 2020, we conducted a telephone survey of Okanagan residents on local water issues, updating a similar survey done in 2014. The survey found growing concern for water issues in the valley and support for conservation and protection. Of particular note was concern about the impacts of forest fires, invasive mussels and climate change. The survey is an important tool in gauging awareness and understanding of water issues, helping guide outreach, as well as other water management efforts. More about the survey can be found **here**.

In response to requests from local educators for Okanagan water education resources, we developed "Our Relationship with Water in the Okanagan—Explorations in Outdoor Education to Support the B.C. Curriculum." The colourful and easy-to-follow guides were created in collaboration with syilx Knowledge Keepers, several education partners, including staff at School District 22 and 23, and the UBC Okanagan School of Education.



Lost Rivers online screening and panel event poster



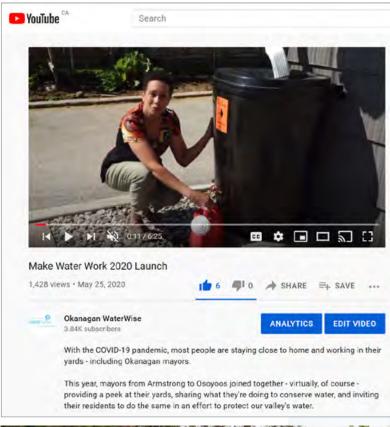
The guides are geared to K-12 and include an "Introduction" with tips for successful outdoor education, an introduction to local Indigenous perspectives and culture, lesson plans and worksheets. The "Okanagan Watershed and Climate" module includes background on the valley's water, climate change impacts, syilx perspectives, and several more activities. The third guide, "Building Outdoor Learning Spaces," looks at types of outdoor spaces and how to take a project from vision and design to construction and maintenance. The guides are available here.

Learn more about Okanagan WaterWise and find a growing number of resources for residents, businesses, educators and students, and those with a general interest in water, including our newly revised "Slow it. Spread it. Sink It!" guide, at www.OkWaterWise.ca.

STAY WATERWISE!

- "Like" us on Okanagan WaterWise Facebook,
- follow us on Okanagan WaterWise Instagram
- and on Okanagan WaterWise Twitter.
- Plus, check out our Okanagan WaterWise YouTube channel.

"Our Relationship with Water," education guides poster





Make Water Work

This past year marked the 10th year for the **Make Water Work** (MWW) campaign, aimed at addressing the second largest use of all water in the Okanagan, residential outdoor use. The campaign is delivered in partnership with Okanagan local governments and utilities. Past years have included a public launch, but we had to do things differently due to the pandemic. Instead, we invited Okanagan mayors to submit videos, offering a peek into their own yards and sharing how they were conserving water. The results were fabulous. The videos were compiled into one polished and produced piece, which can be found **here**.

OkWaterWise also teamed up with the Okanagan Xeriscape Association to expand its *Make Water Work Plant Collection*, growing the list from 54 to 105 plants. In response to public feedback, the updated list includes a number of native and edible plants. The number of garden centre partners in the valley promoting the collection also grew to nine.

With no face-to-face outreach last summer, the campaign relied on social media and other advertising to get the message out. Between May and October, the MWW website had over 13,000 visits with more than 9,800 being first time visitors. While on the website, 707 people pledged to conserve—a 29% increase over 2019. Visitors also looked at tips to conserve water, learned about the Plant Collection, found water restrictions, and more. Many thousands more heard and saw the messaging on social media, radio, buses, and more.

TOP: Screenshot from YouTube video of Okanagan mayors pledging to "Make Water Work"

BOTTOM: OBWB Chair Sue McKortoff giving socially distant, COVID-friendly, elbow bump to Chris Pieper, Mayor of Armstrong - Make Water Work 2021 Champion Community

OKANAGAN BASIN WATER BOARD

Don't Move A Mussel

As the #1 destination for invasive mussel-infested watercraft in B.C., the "Don't Move A Mussel" (DMM) campaign remains an important part of the outreach work of the OBWB's Okanagan WaterWise program. Due to the pandemic, we had to be fluid with our outreach efforts and move from in-person to online. We updated the website www.DontMoveAMussel.ca, as well as print and radio campaigns, and used billboards, buses, radio, digital ads, and Facebook and Instagram ads to get our message out.

For the last several years, OBWB-OkWaterWise has provided funds to the Okanagan and Similkameen Invasive Species Society (OASISS) to extend DMM outreach efforts, and their outreach was also changed-up to accommodate COVID-19 restrictions. We provided additional materials and support to the Regional District of North Okanagan and Vernon RCMP volunteers who conducted limited outreach as well. In all, the three groups conducted 13 Okanagan boat launch visits and interacted with people from 562 vessels.

In an effort to meet outreach goals, we provided OASISS with digital materials to provide to business partners (e.g. yacht clubs, marinas, info. centres, etc.) to help 'Spread the message. Not the mussel.' OASISS provided the materials to more than 100 interested businesses. Funds to OASISS also went to monitor valley waterways for the mussels and recruit residents to help





LEFT: Tourism Kelowna, helping 'Spread the message. Not the mussel.' - Photo courtesy Tourism Kelowna RIGHT: OASISS staff conducting boater outreach, extending the "Don't Move A Mussel" message

monitor from their private docks and conduct invasive clam shoreline surveys.

In addition to the DMM campaign, the OBWB sent letters to the B.C. government calling for stronger efforts to prevent invasive mussels. You can find our letters here.

Despite having to pivot to a new way of doing outreach, we saw successes. Between May and October, 2020 the DMM website had 6,669 visitors with 5,780 being unique (up from 4,199 in 2019).

AquaHacking

Since 2015, the AquaHacking Challenge has engaged with software developers, engineers and marketers from various universities and colleges in Canada to create multidisciplinary teams and develop clean-tech engineering, web and mobile solutions to pressing water issues. In early 2021, the OBWB and AquaForum partnered for the second year to host a challenge, this time expanding the area from British Columbia (AquaHacking 2020 B.C. Challenge) to Western Canada, including Alberta, Manitoba and Saskatchewan. Given the COVID-19 restrictions this challenge is 100% virtual.

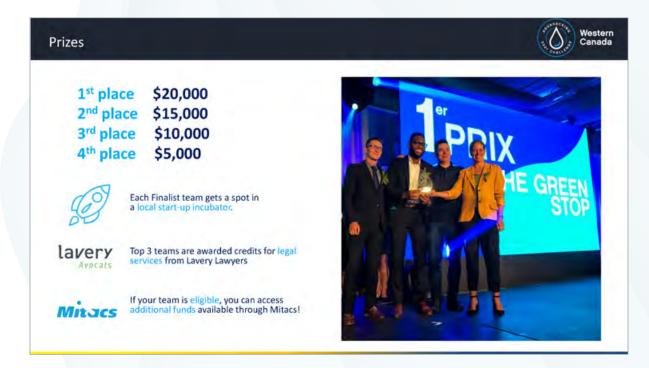
The Western Canada AquaHacking Challenge was launched in January 2021 with the announcement of this year's water issues which teams could choose to work on:

- Optimization of drinking water/ wastewater treatment plants
- 2. On-Farm nutrient capture and recycling
- 3. Toxic algal blooms
- 4. Innovative 'social' technologies for water information

The focus of the challenge this year is on demand-driven innovation. Water issue leaders from Canadian universities and industry provided expert insights and relevant data to the hacking teams to ensure they better understood the issues.

Participant registration for the Western Canada Aqua-Hacking Challenge closed on April 15, with 27 teams and a total of 150 participants from across Canada, with significant representation from the western provinces. During the semi-final event in May, teams pitched their solutions to a group of judges who evaluated their projects in three categories: business potential, technology, and benefits to water and the environment.

The top teams, now in Phase 2, are working on and improving their solutions with the support of mentors and organizers in preparation for the final event that will take place on September 14th when the winners will be announced. Prizes include \$58,000 in seed-funding and a secured spot in a local start-up incubator.



MILFOIL CONTROL

Invasive Furasian watermilfoil was first introduced to the Okanagan in the early 1970's. The board runs a year-round control program to prevent milfoil growth by de-rooting the plant in the winter, and by cutting and removing the tops of the plant during the summer. While there is no permanent solution for milfoil control in such a large area at this time, OBWB has been able to maintain a balance in most years, keeping the weed from overwhelming public beaches and other recreational activities, while also providing benefits to the ecosystem.

Despite the ongoing success of the milfoil control program, we face increasing waves of change; from development along the lakeshore, from climate change, and from regulatory processes. As one of the fastest growing regions in Canada, demand for public beaches and parks is also growing at a significant rate. Old parks are being refurbished, and new parks are being developed. Private development continues along the shores of our lakes, and with it comes new docks and in-water structures. New parks and development mean that people are recreating in areas where there was no call for milfoil control in the past. In-water structures also may change the way the water flows and create new habitat for milfoil. This increases demand for milfoil control, while reducing some

of the shoreline areas we have historically used for our operations.

Climate change is also creating conditions for explosive milfoil growth in some years. Floods in the spring bring nutrients and sediment into the water, fertilizing the invasive plant and creating new habitat. Extreme summer heat provides a longer growing season and increased light penetration, while droughts prevent the scouring effect of prolonged runoffs which would naturally dislodge fledgling weed areas.

All of these changes require a flexible and responsive approach to milfoil management, meeting demand, accounting for regulatory uncertainty, and embracing new science and technologies so we can continue to provide this beneficial service well into the future.







Milfoil rototiller in West Kelowna -Photo courtesy Ernie Romaniuk



Kelowna Waste Water Treatment Plant – Photo courtesy City of Kelowna

SEWAGE FACILITIES ASSISTANCE GRANTS

Each year the OBWB provides grants to Okanagan communities to upgrade septic systems to community sewers. This means wastewater is collected to a central facility and treated to the highest possible standards before being discharged back into nature. Community sewer systems ensure that wastewater goes through a rigorous treatment process, overseen by trained operators. These systems also receive technological upgrades to improve the quality of the water that leaves them. In contrast, many septic systems may not function properly, may not be properly maintained, or may break and leak over time. Many areas near drinking water sources have historically become contaminated by failing septic systems, putting pollutants—including fecal coliforms—into drinking water sources.

Studies have shown a significant reduction in the amount of phosphorus and nitrogen entering Okanagan Lake since the introduction of Sewage Facilities Assistance grants in the 1970s. Most of this reduction has occurred through the building and upgrading of community sewer systems, so that newly developed properties feed their wastewater into a community sewer, rather than creating thousands of new septic systems. Reduced nutrients in the water mean better water quality, better habitat, and less cost to treat source water for drinking.



Looking Forward

After a year of massive change, there is more on the horizon. The OBWB's Water Management Program is now more than 15 years old. In that time, we have undertaken a wide range of initiatives, research and activities to better understand Okanagan water issues and identify how to address them.

Writing this today, in July 2021, the air is filled with wildfire smoke and, unless there is a big change in weather patterns, we are on our way to a significant drought. While some of the OBWB team are leaning into work supporting drought and water conservation, others are leading new projects to continue to support flood resilience. One of the lessons of climate change is that we must work both ends of the weather spectrum simultaneously, because we are susceptible to both extremes in any given year.

While Okanagan Lake is a natural water body, not a man-made reservoir, the Province of B.C. has some control over how much water is held in the lake through the winter, and the timing of releases downstream to the Okanagan River channel. Guided by forecasts and snow accumulations, provincial staff can release extra water to buffer the risk of floods, or hold more water back to buffer the risk of water shortages. During the course of our

2020 flood mapping project, we identified a need to review the operations of the lake, and the dikes, dams, and related infrastructure, in light of the changes to our weather regime. This work, described in a gap analysis in March 2021, will guide much of our water science in the coming year and likely decade.

This year, as part of the COVID-19 recovery, the B.C. government established the Healthy Watersheds Initiative, with funding to protect water quality and supply throughout B.C. We are hopeful that the success of this initiative will lead to the development of a permanent Watershed Security Fund, as part of an overall Watershed Security Strategy to improve protection of water sources. As we work with communities and water purveyors throughout the valley on their source protection challenges, the need for ongoing funding and improved coordination is ever more important.

Meanwhile, there are ever-increasing requests to expand our education and communications efforts—ranging from the campaigns for Make Water Work and Don't Move a Mussel, to the Okanagan Water Educators guides and the ongoing work to facilitate communication and understanding among local communities and with senior governments. Living in this semi-arid climate, the public places a high value on water and the environment, and has a thirst for greater water knowledge.

All of these efforts are made possible through the wide-ranging partnerships we enjoy with Okanagan communities, stakeholders, agencies and organizations, and all levels of government. These partnerships are our foundation, and also what lets us build and grow our projects and programs to new heights.



Financial Overview

In 2020-21, the OBWB received \$265,608 in grants for water management projects, ranging from a Healthy Watersheds Initiative grant to support the Source Water Protection Toolkit, to a B.C. Ministry of Forests, Lands, Natural Resource Operations and Rural Development grant to write a research gap analysis for the review and update of the Okanagan Lake Regulation System.

As well as these direct grants, we had a number of financial partnerships supporting our work on the 2021 Western Canada AquaHacking Challenge. And, the "Make Water Work" and "Don't Move a Mussel" campaigns attracted in-kind contributions from media and other partners together totaling more than \$100,000.

As a grantmaker, in 2020-21 the OBWB awarded more than \$1.29 million in infrastructure grants to improve wastewater treatment, and \$350,000 in Water Conservation and Quality Improvement (WCQI) Grants to local governments and community groups. This was the first year of the increased grant budget for WCQI grants, (approved by the board in 2019). The previous WCQI budget was \$300,000/year.

Another aspect of our grantmaking is to be active participants in both Environmental Funders Canada (EFC), and the B.C. Water

Funders Collaborative. By building relationships with other funders, we can raise awareness about Okanagan water issues, and perform a matchmaking role with grantees in the valley. This year, James Littley, the OBWB's Operations and Grants Manager, was the Chair of the national EFC conference, helping to organize the conference held online in May, 2021.

Many university researchers have their own funding, and simply need a community partner to support their work. The OBWB helps by providing access to data, and making introductions to establish community-based research programs. In this way, we leverage the talents and resources of our post-secondary institutions to take on water issues—often with no need for local funds. This year, we supported researchers in the UBC Okanagan Department of Creative Studies, helping them secure a large

multi-year grant for their Okanagan WaterWays Touring Exhibition and Speaker Series. We also continued our partnership with the UBC Okanagan Engineering Department, supporting their work on a benchmarking project for Okanagan municipal water systems.

This was the ninth year in a row that OBWB did not have a budget increase. It's a balancing act, maintaining or expanding projects and programs, and maintaining equipment, while keeping costs down. We are able to continue our high productivity and excellent service delivery because of our strong partnerships and ability to stretch and leverage every dollar.



Okanagan Basin Water Board **Financial Statements** For the year ended March 31, 2021

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Management's Responsibility for Financial Reporting

The accompanying financial statements of the Okanagan Basin Water Board are the responsibility of management and have been approved by the Chairperson on behalf of the Board.

The financial statements have been prepared by management in accordance with Canadian public sector accounting standards. Certain amounts used in the preparation of the financial statements are based on management's best estimates and judgements. Actual results could differ as additional information becomes. available in the future. When atternative accounting methods exist, management has chosen those it deems most appropriate in the circumstances, in order to ensure that the financial statements are presented fairly, in all material respects:

The Okunagan Basin Water Board maintains systems of internal accounting and administrative controls of high quality, consistent with reasonable cost. Such systems are designed to provide reasonable assurance that the financial information is relevant, reliable and occurate and the Board's assets are appropriately accounted for and adequately safeguarded.

The Board is responsible for ensuring that management fulfills its responsibilities for financial reporting and is ultimately responsible for reviewing and approving the financial statements.

The Board meets periodically with management, as well as the external auditors, to discuss internal controls over the financial reporting process, auditing matters and financial reporting issues, to satisfy themselves that each party is properly discharging their responsibilities, and to review the annual report, the financial statements and the external auditor's report.

The financial statements have been audited by 800 Canada LIP Chartered Professional Accountants in accordance with Canadian generally accepted auditing standards on behalf of the Board. The independent auditor's report expresses their opinion on these financial statements. The auditors have full and free access to the accounting records and to the Board of the Okanagan Basin Water Board.

Anna Warwick Sears

Objectly stands by Arms Warvest. Date: 2025 07 66 69:32:36-07/00*

Executive Director July 6, 2021



Tel: 250 763 6700 Fax: 250 763 4457 BDO Canada LLP 1631 Dickson Avenue, Suite 400 Kelowna BC V1Y 0B5 Canada

Independent Auditor's Report

To the Directors of Okanagan Basin Water Board

Opinion

We have audited the financial statements of the Okanagan Basin Water Board (the "Board"), which comprise the statement of financial position as at March 31, 2021, and the statements of financial operations, change in net financial assets and cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Okanagan Basin Water Board as at March 31, 2021, and its financial operations, change in net financial assets and cash flows for the year then ended in accordance with public sector accounting standards.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Board in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Unaudited Information

We have not audited, reviewed or otherwise attempted to verify the accuracy or completeness of the information included elsewhere in the annual report.

Responsibilities of Management and Those Charged with Governance for the Financial Statements Management is responsible for the preparation and fair presentation of these financial statements in accordance with public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Board's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Board or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Board's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

BDO Canada LLP, a Canadian limited liability partnership, is a member of BDO International Limited, a UK company limited by guarantee, and forms part of the international BDO network of independent member firms.



As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due
 to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit
 evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not
 detecting a material misstatement resulting from fraud is higher than for one resulting from
 error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the
 override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit
 procedures that are appropriate in the circumstances, but not for the purpose of expressing an
 opinion on the effectiveness of the Board's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Board's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Board to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including
 the disclosures, and whether the financial statements represent the underlying transactions and
 events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

BDO Canada LLP

Chartered Professional Accountants

Kelowna, British Columbia July 6, 2021

Okanagan Basin Water Board Statement of Financial Position

March 31	2021	2020
Financial assets		
Chili (Note t)	5 3,153,460	\$ 2,389,778
Accounts receivable	237,547	435,580
	3,391,007	3,825,358
Financial liabilities		
Accounts payable and accrued liabilities	225,276	251,253
Grants payble (Note 2)	319,009	421,972
Holdbank payable		146,363
	544,285	779,546
Net financial assets	2,846,722	3,045,812
Non-financial assets		
Prepaid expenses	53,571	
Tangible capital assets (Note 3)	324,450	587,553
Accumulated Surplus (Note 4)	\$ 3,224,753	\$ 3,433,365

Approved on behalf of the Board:

The argumousying summary of provincer accounting poistes and notes are an intercel have of times immented statements.

Okanagan Basin Water Board **Statement of Financial Operations**

For the year ended March 31	2021	2021	2020
	Actual	Budget	Actual
Revenue (Note 10)			
Levies from member Regional Districts (Note 5)	\$ 3,451,929 \$	3,451,930 \$	3,449,170
Grants	265,608	-	1,254,950
Interest and other income	 15,094	40,800	72,107
	 3,732,631	3,492,730	4,776,227
Expenses (Note 10)			
Aquatic weed control	662,962	820,500	664,949
Sewerage facilities assistance	1,330,077	1,330,080	1,270,368
Water management	 1,948,204	1,372,150	2,892,566
	 3,941,243	3,522,730	4,827,883
Annual (Deficit) Surplus (Note 10)	(208,612)	(30,000)	(51,656)
Accumulated Surplus, beginning of year	 3,433,365	3,433,365	3,485,021
Accumulated Surplus, end of year	\$ 3,224,753 \$	3,403,365 \$	3,433,365

The accompanying summary of significant accounting policies and notes are an integral part of these financial statements

Okanagan Basin Water Board Statement of Change in Net Financial Assets

For the year ended March 31	2021	2021	2020
	Actual	Budget	Actual
Annual (deficit) surplus	\$ (208,612) \$	(30,000) \$	(51,656)
Acquisition of tangible capital assets	(6,898)	-	(3,993)
Amortization of tangible capital assets	69,990	-	78,852
Prepaid expenses	(53,570)		
Net change in net financial assets	(199,090)	(30,000)	23,203
Net financial assets, beginning of year	 3,045,812	3,045,812	3,022,609
Net financial assets, end of year	\$ 2,846,722 \$	3,015,812 \$	3,045,812

Okanagan Basin Water Board **Statement of Cash Flows**

For the year ended March 31	2021	2020
Operating activities		
Annual (deficit) surplus	\$ (208,612) \$	(51,656)
Amortization	69,990	78,852
Gain on disposal of tangible capital assets	-	-
	 (138,622)	27,196
Changes in working capital:		
Accounts receivable	198,033	357,816
Accounts payable and accrued liabilities	14,065	(200,126)
Grants payable	(102,963)	16,868
Holdback payable	(146,363)	6,883
Prepaid Expenses	 (53,570)	
	 (90,798)	181,441
Cash from operations	 (229,420)	208,637
Investing Activities		
Net change in investments	-	2,915,874
	-	2,915,874
Capital Activities		
Purchase of tangible capital assets	(6,898)	(3,993)
Change in cash during the year	(236,318)	3,120,518
Cash, beginning of year	 3,389,778	269,260
Cash, end of year	\$ 3,153,460 \$	3,389,778

The accompanying summary of significant accounting policies and notes are an integral part of these financial statements

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The accompanying summary of significant accounting policies and notes are an integral part of these financial statements

Okanagan Basin Water Board Summary of Significant Accounting Policies

March 31, 2021

Nature of Business

The Okanagan Basin Water Board ("The Board") is established under Section 138 of the Municipalities Enabling and Validating Act (Province of British Columbia) and administers and operates the aquatic weed control program, the sewerage facilities assistance fund, and a water management program as an agent of the three participating regional districts. The participating regional districts are: Regional District of Central Okanagan (R.D.C.O.); Regional District of Okanagan-Similkameen (R.D.O.S.); and Regional District of North Okanagan (R.D.N.O).

Basis of Presentation

It is the Board's policy to follow accounting principles generally accepted for municipalities in the Province of British Columbia and to apply such principles consistently. The financial statements include the account of all funds for the Board. All inter-fund transfers have been eliminated. They have been prepared using guidelines issued by the Public Sector Accounting Board (PSAB) of the Chartered Professional Accountants of Canada.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles for British Columbia Regional Districts require management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the year. Actual results could differ from those estimates

Portfolio Investments

Portfolio investments are recorded at the lower of cost and market value.

Financial Instruments

The Board's financial instruments consist of cash, portfolio investments, accounts receivable, accounts payable and accrued liabilities. Unless otherwise noted, it is management's opinion that the Board is not exposed to significant interest, currency, or credit risks arising from these financial instruments. The fair values of these financial instruments approximate their carrying values, unless

Okanagan Basin Water Board Summary of Significant Accounting Policies

March 31, 2021

Tangible Capital Assets

Tangible capital assets are recorded at cost less accumulated amortization. Cost includes all costs directly attributable to acquisition or construction of the tangible capital asset including transportation costs, installation costs, design and engineering fees, legal fees, and site preparation costs. Contributed tangible capital assets are recorded at fair value at the time of the donation, with a corresponding amount recorded as revenue. Amortization is recorded on a straight-line basis over the estimated life of the tangible capital asset commencing once the asset is available for productive use as follows:

Buildings 25 years Equipment 4-10 years Vehicles 5-7 years Office Furniture & Equipment 10 years Computers 4 years

Revenue Recognition

The levies from member Regional Districts are recognized when the levies for the fiscal year are approved by the Board and requisitioned.

Grants, interest and other income are recognized in the period in which they are earned.

Government Transfers

Government transfers, which include grants and funding agreements are recognized in the financial statements in the period in which events giving rise to the transfers occur, providing the transfers are authorized, any eligibility criteria have been met, and reasonable estimate of the amount can be made.

March 31, 2021

1. Cash

The Board's bank account is held at one financial institution. The bank account earns interest at bank prime minus 2.25%.

2. Grants Payable

The sewerage facilities grants program provides funds for municipalities to upgrade their waste water treatment system, the Board's grants provide partial funding for debt repayment on 20 - 25 year MFA notes. The process for the sewerage facilities grants program involves municipalities requesting an approximate grant amount early in their funding process, then verifying the final grant amount once municipalities have secured MFA notes and begin making payments. Once the grants are awarded, the Board will only issue the grants based on the proper documentation submitted by individual municipalities, such as formal invoice to the Board.

The Water Conservation and Quality Improvement grant program provides funds to Okanagan local governments, improvement districts, and non-government organizations to support innovative, tangible, on the ground, water initiatives. The program takes a collaborative approach to water management issues and promotes more uniform standards and best practices throughout the valley. Up to \$350,000 per year is made available for Okanagan projects. Grants will be expensed in the year of approval as per the budget.

Okanagan Basin Water Board Notes to Financial Statements

1 31, 2021								
Tangible Capital Assets		Buildings	Equipment	Vehicles	Office Furniture & Equipment	Computers	Work In Progress	2021 Total
Cost Balance, beginning of year Additions	₩	118,352 \$	1,233,201 \$	166,022 \$	\$ 877.8	25,542 \$ 6,898	٠, ,	1,546,890
Balance, end of year		118,352	1,233,201	166,022	3,773	32,440		1,553,788
Accumulated amortization								
Balance, beginning of year		61,439	934,777	139,264	2,859	20,998	,	1,159,337
Amortization		4,743	43,015	18,235	152	3,845		066'69
Balance, end of year		66,182	977,779	157,499	3,011	24,843		1,229,327
Net book value	s	52,170 \$	255,409 \$	\$,523 \$	762 \$	\$ 765,7	\$ -	324,460

March 31, 3
3. Tang
Cost
Balara

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Okanagan Basin Water Board Notes to Financial Statements

Prior year comparative information:	nation:	Buildings	Equipment	Vehicles	Office Furniture & Equipment	Computers	Work In Progress	2020 Total
Cost								
Balance, beginning of year	\$	118,352 \$	1,233,201 \$	166,022 \$	3,773 \$	27,181 \$	\$	1,548,529
Additions				,		3,993	,	3,993
Disposals						(5,632)		(5,632)
Balance, end of year		118,352	1,233,201	166,022	3,773	25,542		1,546,890
Accumulated amortization								
Balance, beginning of year		26,697	883,258	121,028	2,707	22,427	,	1,086,117
Amortization		4,742	51,519	18,236	152	4,203		78,852
Disposals						(5,632)		(5,632)
Balance, end of year		61,439	934,777	139,264	2,859	20,998		1,159,337
Net book value	\$	56,913 \$	298,424 \$	\$ 85/22	914 \$	4,544 \$	\$ -	387,553

Okanagan Basin Water Board Notes to Financial Statements

March 31, 2021

4. Accumulated Surplus

The Board maintains a reserve for future expenditures. Canadian public sector accounting standards require that non-statutory reserves be included with operating surplus. The reserve and changes therein are included in the operating surplus as follows:

		2021	2020
Aquatic Weed Control Equipment Reserve			
Balance, beginning of year	\$ 66	2,855 \$	417,468
Proceeds from sale of tangible capital assets		-	-
Net surplus	15	3,452	174,740
Transfer of amortization	6	1,990	70,647
Balance, end of year	87	8,297	662,855
Invested in Tangible Capital Assets			
Balance, beginning of year	38	7,553	462,412
Transfer for acquisition of tangible capital assets		6,898	3,993
Transfer of amortization	(6	9,990)	(78,852)
Balance, end of year	32	4,460	387,553
Sewerage Facilities Assistance Reserve Fund			
Balance, beginning of year	1,38	5,860	1,264,966
Net deficit	(4	9,427)	120,894
Balance, end of year	1,33	6,434	1,385,860
Water Management Accumulated Surplus			
Balance, beginning of year	99	7,097	1,340,175
Net deficit	(31	2,637)	(347,290)
Transfer of amortization		8,000	8,205
Transfer for acquisition of tangible capital assets	(6,898)	(3,993)
Balance, end of year	68	5,562	997,097
	\$ 3,22	4,753 \$	3,433,365

March 31, 2021

5. Levies from Member Regional Districts

	2021	2021	2020
	 Actual	Budget	Actual
North Okanagan	\$ 600,290 \$	600,290	\$ 602,570
Central Okanagan	2,158,147	2,158,148	2,153,662
Okanagan Similkameen	 693,492	693,492	692,938
	\$ 3,451,929 \$	3,451,930	\$ 3,449,170

6. Sewerage Facility Grants to Member Local Governments

Included in Sewerage Facilities Assistance are the following grants to member local governments:

	 2021	2020
City of Kelowna	\$ 182,882 \$	182,882
City of Penticton	152,338	170,336
City of Vernon	91,131	87,748
City of West Kelowna	43,317	43,317
District of Coldstream	11,339	11,340
District of Lake Country	205,330	153,850
District of Peachland	145,289	130,889
District of Summerland	262,516	269,880
Town of Osoyoos	27,922	11,278
Regional District of North Okanagan	4,679	4,679
Regional District of Okanagan Similkameen	119,665	119,665
Westbank First Nation	43,669	44,503
	\$ 1,290,077 \$	1,230,367

Okanagan Basin Water Board Notes to Financial Statements

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March 31, 2021

7. Budget Information

The budget adopted by the Board was not prepared on a basis consistent with that used to report actual results based on current Canadian public sector accounting standards ("PSAB"). The budget was prepared on a modified accrual basis while PSAB now require a full accrual basis. The following reconciles the difference.

	 2021	
Budget surplus (deficit) for the year as per board budget	\$ -	
Less: Transfer from previous years surplus in revenues	 (30,000)	
Budget deficit per statement of financial operations	\$ (30,000)	

8. Commitments

The Board has exercised its right to renew their lease with the Regional District of North Okanagan for another five year term, which will end March 31, 2024 for the lease of land, on which the Board's machine shop building resides. The original agreement provided for an annual lease payment of \$14,560, with increases in 2014 and 2019 indexed to the annual CPA for British Columbia. At the conclusion of the lease term, ownership of the Board's building will be transferred to the Regional District of North Okanagan.

The Board is also currently in a five year lease agreement, which expires December 31, 2023, with the option to renew for one additional term of five years, with the Regional District of Central Okanagan for office rent and operating and overhead costs as well as financial, administrative and technology services. The agreement provides for a monthly payment of \$9,303.

OKANAGAN BASIN WATER BOARD 33

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March 31, 2021

9. Employee Benefits

Retirement Benefits

The Board and its employees contribute to the Municipal Pension Plan (a jointly trusteed pension plan). The board of trustees, representing plan members and employers, is responsible for administering the plan, including investment of assets and administration of benefits. The plan is a multi-employer defined benefit pension plan. Basic pension benefits are based on a formula. As at December 31, 2019, the plan has about 213,000 active members and approximately 106,000 retired members. Active members include approximately 41,000 contributors from local governments.

Every three years, an actuarial valuation is performed to assess the financial position of the plan and adequacy of plan funding. The actuary determines an appropriate combined employer and member contribution rate to fund the plan. The actuary's calculated contribution rate is based on the entry-age normal cost method, which produces the long-term rate of member and employer contributions sufficient to provide benefits for average future entrants to the plan. This rate may be adjusted for the amortization of any actuarial funding surplus and will be adjusted for the amortization of any unfunded actuarial liability.

The most recent valuation for the Municipal Pension Plan as at December 31, 2018, indicated a \$2,866 million funding surplus for basic pension benefits on a going concern basis.

The Board paid \$61,693 (2020 - \$62,541) for employer contributions to the plan in fiscal 2021.

The next valuation will be as at December 31, 2021, with results available in 2022.

Employers participating in the plan record their pension expense as the amount of employer contributions made during the fiscal year (defined contribution pension plan accounting). This is because the plan records accrued liabilities and accrued assets for the plan in aggregate, resulting in no consistent and reliable basis for allocating the obligation, assets and cost to individual employers participating in the plan.

Okanagan Basin Water Board Notes to Financial Statements

March 31, 2021

10. Segment Disclosures

Aquatic Weed Control

This program controls the growth of Eurasian watermilfoil in the shallow waters around Okanagan beaches and boating areas. This is a year-round program managing weed growth with rototillers in the winter and harvesters in the summer. The goal of the program is to keep public areas clear of weed, but when time allows operators and equipment will also contract work on a cost-recovery basis.

Sewerage Facilities Assistance

This program reduces the discharge of polluted water to Okanagan lakes and streams by supporting upgrades of sewage treatment plants and community sewers. Grants go to Okanagan municipalities as a local match for senior government infrastructure funding. It is one of the Board's longest-running programs, and has led to great improvements in water quality.

Water Management

This initiative undertakes projects and programs that support water sustainability in the Okanagan. It supports the original mandate of the board, providing leadership and coordinating water management activities in the interests of Okanagan citizens. The initiative includes the Water Conservation and Quality Improvement grant program, water education and outreach, advocacy to senior government for Okanagan water concerns, and establishing the science and monitoring systems required for informed decision making. Many of the projects are conducted as multi-year partnerships with other funding agencies, and operating surplus balances are specifically designated for project commitments through funding agreements with senior government, or targeted to planned projects in development. The Water Management Accumulated Surplus includes \$545,964 (2020 - \$879,743) for previously committed projects.

For the year ended March 31, 2021

10. Segment Disclosures and Expense by Object (continued)

	Aquati Cor	Aquatic Weed Control	Sewera Ass	Sewerage Facilities Assistance	Water Management		2021 Total
Revenues							
Levies	\$	811,500	\$	1,276,580	\$ 1,363,849	10	3,451,929
Grant income				1	265,608		265,608
Interest income		4,914		4,070	6,110		15,094
Gain on disposal of assets				,			
		816,414		1,280,650	1,635,567		3,732,631
Expenses							
Assistance grants				1,290,077	350,000		1,640,077
Amortization		61,990		,	8,000		066'69
Contract services		6,650		,	096'206		914,610
Director's remuneration and expenses		9,572			9,572		19,144
Equipment costs		83,767			366		84,133
Insurance		34,049			(1,555)		32,494
Interest charge		13		,	426		439
Office		13,976		,	33,545		47,521
Outreach and publicity		,			226'96		6,977
Overhead allocation		(20,000)		40,000	(20,000)		
Professional fees		39,013			37,996		77,009
Rental costs		23,462			8,903		32,365
Safety		3,291			225		3,516
Stewardship council expenses		,			791		791
Travel, conferences and meetings		3,267			4,324		7,591
Utilities, yard supplies and maintenance		18,664			816		19,480
Wages and benefits		385,248		•	509,858		895,106
		662,962		1,330,077	1,948,204		3,941,243
Annual surplus (deficit)	\$	153,452	\$	\$ (49,427)	(312,637)	\$	(208,612)

Okanagan Basin Water Board **Notes to Financial Statements**

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For the year ended March 31, 2021 (Prior year comparative information)

10. Segment Disclosures and Expense by Object (continued)

	Aquatic Weed Control		sewerage raciinies Assistance	water Management	Total
Revenues					
Levies	\$ 824,900	\$ 006	1,363,320	\$ 1,260,950	\$ 3,449,170
Grant income				1,254,950	1,254,950
Interest income	14,7	14,789	27,942	29,376	72,107
Gain on disposal of assets					
	839,689	689	1,391,262	2,545,276	4,776,227
Expenses					
Assistance grants			1,230,368	318,746	1,549,114
Amortization	70,6	70,647		8,205	78,852
Contract services	12,6	12,689		1,774,789	1,787,478
Director's remuneration and expenses	12,872	372		12,872	25,744
Equipment costs	82,3	82,208		2,825	85,033
Insurance	32,484	184		1,556	34,040
Interest charge		25		641	999
Office	13,0	13,028		29,144	42,172
Outreach and publicity		19		151,110	151,129
Overhead allocation	(20)	(20,000)	40,000	(20,000)	
Professional fees	37,8	37,873		37,873	75,746
Rental costs	23,4	23,462		8,903	32,365
Safety	3,4	3,410		200	3,610
Stewardship council expenses				4,731	4,731
Travel, conferences and meetings	2,1	2,181		52,789	54,970
Utilities, yard supplies and maintenance	18,2	18,236		954	19,190
Wages and benefits	375,815	315		507,228	883,043
	664,949	949	1,270,368	2,892,566	4,827,883
Annual surplus (deficit)	\$ 174,740	40 \$	120,894	\$ (347,290)	\$ (51,656)

